

appear to disclose where pipelines are specifically located and why or how such selections are determined. It therefore appears that the "System Map" is the primary document upon which the 102 and 103 rejections are based.

In the rejection of the claims based on the disclosure in the Colonial Pipeline Company documents, it was stated that "the claims do not specify a specific length of pipeline". Applicant contends otherwise.

In Fig. 1, applicant has diagrammatically depicted most of the major interstate highways of the United States especially those which extend in a generally north-south direction or east-west direction. These are the interstate highways referred to in the claims. Each US Interstate Highway extends several hundreds, if not thousands, of miles. Claim 1 specifies that the pipeline is located in the interstate highway median and extends the major portion of the length of the highway from a refinery to a distribution point. The pipeline would therefore extend at least several hundred miles below ground in the median of the interstate highway.

While applicant has not defined a "specific length" (in terms of miles or kilometers), applicant has defined the length of the pipeline in terms of the length (major portion) of the highway. In order to meet this limitation, applicant contends that the Colonial Pipeline Company documents or any other reference must show or suggest this feature. Applicant contends that none of the sections of the Colonial Pipeline Company web site pages disclose or suggest this feature. Further, none of the sections disclose a petroleum pipeline located below the ground of an interstate highway median for any length of the highway.

However, it is urged that it would be inherent (anticipation) that should the distribution system need to pass or parallel an interstate highway, that proper "permission is acquired.

The meaning of the expressions "to pass" or "parallel" are less than clear. For the purposes of argument, it is assumed that the expression "to pass" is intended to mean "to extend across or transversely of the interstate highway" (intersect). It is also assumed that the expression "to parallel" an interstate highway is intended to mean the pipeline would extend parallel to an interstate highway but not necessarily be located in the interstate highway right-of-way.

Neither of the suggested terms “to pass” or “to parallel” anticipates the feature of the pipeline extending the major length of the interstate highway below ground in the highway median as defined in Claim 1. This claimed feature in Claim 1 is not disclosed in the Colonial Pipeline Company documents, and these documents are silent about this asserted inherent characteristic.

“To serve as an anticipation when the reference (Colonial Pipeline Company documents) is silent about the asserted inherent characteristic, such a gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described (Colonial Pipeline location) in the reference (Colonial Pipeline Company documents) and that it would be recognized by persons of ordinary skill (pipeline design engineers).

Continental Can Company USA, Inc. v Monsanto Co., 948 Fd 2d 1264, 20 USPQ 2d 1746 (Fed. Cir. 1991).

Since the Colonial Pipeline Company documents (sections) are silent as to the asserted inherent characteristic (underground pipeline in interstate highway median) then applicant contends that the Colonial documents can not serve as an anticipation unless it can be demonstrated by extrinsic evidence that the missing feature is present (in Colonial) and it would be recognized as present by persons of ordinary skill. However, no extrinsic evidence of this missing feature has been forthcoming in the rejection of the claims.

In applicant’s claimed invention, applicant has used the interstate highway system as a petroleum pipeline guide for efficient distribution of an energy product. Applicant contends that this particular method has never been practiced before. Claim 1, as well as the other claims of the application, were rejected as inherent and obvious. While inherency and obviousness are different concepts, applicant believes that it would be instructive to consider the practice of pipeline route designers for the purpose of obviousness. Further, the practice of pipeline route designer would also be helpful in whether the missing claim feature is present in the Colonial Pipeline Company reference documents.

Applicant has enclosed herewith as Exhibit 1 a copy of Association of Oil Pipeline Lines (AOPL) web site pages, entitled How Pipelines Work. This document

contains two maps illustrating the location of the major crude oil pipelines and the major refined oil pipelines in the United States. A comparison of these maps with Fig. 1 of the Instant application shows that neither refined oil pipelines or crude oil pipelines track interstate highways and that the pipelines are not located below ground in median of the interstate highways. Applicant has also enclosed herewith enlarged images of the maps as parts of Ex. 1.

Applicant contends that these maps are evidence of how oil pipeline routes are designed by those of ordinary skill in the art, namely pipeline route engineers. The practice of pipeline route design engineers is not to locate a pipeline below ground in an interstate highway median in which the pipeline extends a major portion of the length of the interstate highway from a refinery to a distribution center.

Applicant has also enclosed herewith as Exhibit 2 web site pages from Interstate Natural Gas Association of America entitled "Public Education". The content of this document discusses the selection of a route for a typical gas pipeline and the construction thereof. Applicant contends that a clear inference of the content of the AOPL document demonstrates that design engineers for gas pipelines do not position pipelines below ground in an interstate highway median from a refinery to a distribution center.

Finally, Ex. 3 is a copy depicting one of Koch Industries pipelines. Ex. 4 is document entitled "Pipeline Maps" presented by Michigan Public Service Commission. The gas pipelines shown in Fig. 4 do not extend below ground in an interstate highway median from a refinery to a distribution center. Similarly, the oil pipelines of Ex. 3 do not extend below ground in an interstate highway median from a refinery to a distribution point.

Applicant believes that the content of Ex. 1, 2, 3, and 4 represents the practice of oil and gas line operators and pipeline route engineers in designing and constructing a gas or oil pipeline route. Applicant further believes that this (Ex. 1, 2, 3, 4) is the only kind of evidence that would be helpful in showing whether the missing descriptive matter (pipeline in interstate highway median) is present in the Colonial Pipeline reference and would be so recognized by persons of ordinary skill.

Applicant contends that the Colonial Pipeline reference does not disclose a pipeline route extending below ground in an interstate highway median from a refinery to

a distribution center. Applicant also believes that the evidence embodied in Ex. 1, 2, 3, and 4 bolsters applicant's contention that persons of ordinary skill would not believe that the pipeline shown in the Colonial Pipeline document is positioned below ground in an interstate highway median and extends from a refinery to a distribution center. Accordingly, it is applicant's contention that the Colonial Pipeline reference can not serve as an anticipation of applicant's invention as defined in the claims.

In the obviousness rejection, it was proposed that "it would have been obvious to one of ordinary skill in the art to place a pipeline under the median of a highway, since doing {so} would facilitate laying out of the pipeline from 'point a' to 'point b'". Applicant contends that it would not be obvious to one of ordinary skill in the art to place a pipeline under the median of an interstate highway even though all pipelines have some linear extent.

"A person of ordinary skill in the art is 'one who thinks along the line of conventional wisdom in the art and is not one who undertakes the innovate...'" Standard Oil Co. v American Cyanamid Co. 774 F 2d 448, 227 USPQ 293 (Fed. Cir. 1985). One of ordinary skill in the art is a pipeline route engineer. The conventional wisdom followed by a pipeline route designer is embodied in the contents of Ex. 1, 2, 3, and 4. Not any references or documents known to applicant disclose a process of placing a pipeline below ground in an interstate highway median. Based on the information contained in Ex. 1, 2, 3, and 4 as well as the Colonial Pipeline reference, pipelines have never been located below ground of an interstate highway median to extend from a refinery to a distribution. Quite to the contrary, persons of ordinary skill in the art appear to studiously avoid positioning a pipeline below ground in an interstate highway median from a refinery to a distribution center.

Since no prior art reference teaches or suggests applicant's claimed invention, applicant contends that it would not be obvious to place a pipeline below the median of interstate highway from a refinery to a distribution center. Accordingly, applicant contends that the claims are allowable over the Colonial Pipeline reference and an early notice of allowance is most respectfully requested.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Mail Stop Non-Fee Amendment, Comm. for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on December 4, 2003.

Herman H Bains

Person signing